

Claims

1. An optical distance detecting or measuring device,
comprising a light source with an emitter optic for
5 projecting a light beam according to the axis of the
emitting optic onto a target to be measured, and a first
detector defining the receiving axis contained in the same
reference plane as the emitting axis, wherein said device
comprises at least a second detector that is aligned with
10 the first detector on an axis contained in a plane that is
inclined at an angle with respect to the reference plane,
said angle being comprised between 10° and 170° .
2. An optical distance detecting or measuring device,
15 comprising at least a first light source with an emitting
optic for projecting a light beam according to the axis of
the emitting optic onto a target to be measured, and a first
detector defining the receiving axis contained in the same
reference plane as the emitting axis, wherein said device
20 comprises at least a second light source that is aligned
with the first light source on an axis contained in a plane
that is inclined at an angle with respect to the reference
plane, said angle being comprised between 10° and 170° .
- 25 3. An optical distance detecting or measuring device,
comprising a light source and receivers, wherein the light
source emits light pulses of different intensities that are
intended alternately for each one of said receivers, the
emitted intensities being regulated in such a manner as to
30 produce signals having identical amplitudes or corresponding
to a predetermined function on the receivers.
4. The device of claim 1, or 2, comprising a light source
and receivers, wherein the light source emits light pulses
35 of different intensities that are intended alternately for

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each one of said receivers, the emitted intensities being regulated in such a manner as to produce signals having identical amplitudes or corresponding to a predetermined function on the receivers.

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5. The device of claim 1, 2 or 3, comprising a detecting system in the form of a position-sensitive detector (PSD).

6. An optical distance detecting or measuring device,
10 comprising a sensor with a single lens including distinct emitting and receiving sectors, each sector being provided with a prism for focusing the light beams on the emitting and the receiving elements, respectively.

15 7. The device of claim 1, 2, or 3, comprising a sensor with a single lens including distinct emitting and receiving sectors, each sector being provided with a prism for focusing the light beams on the emitting and the receiving elements, respectively.

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8. The device of claim 1, wherein the receiving system comprises more than two receivers.

9. The device of claim 2, wherein the emitting system
25 comprises more than two light sources.

10. The device of claim 1, 2, or 3 comprising a group of several receivers and a group of several emitters, each group being aligned on an axis contained in planes of which
30 each one may be inclined individually with respect to said reference plane.

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